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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/519,772

12/24/2004

Ernst Fuchs

6953

60333

7590

06/22/2010

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EXAMINER

WAGGLE, JR, LARRY E

ART UNIT

PAPER NUMBER

3775

MAIL DATE

DELIVERY MODE

06/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--|-------------------------------------|--|
| Office Action Summary | Application No. 10/519,772 | Applicant(s) FUCHS, ERNST | |
| | Examiner Larry E. Waggle, Jr | Art Unit 3775 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12 and 14-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-31 is/are allowed.
- 6) ☒ Claim(s) 12 and 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “means for adjusting the angle of the handle relative to the truncated cone” as required by claim 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because it is not provided in the proper format as listed below. Appropriate correction is required.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art

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known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less

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commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (l) Sequence Listing, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 requires the limitation "a means for adjusting the angle of the handle relative to the axis of the truncated cone." If there is such a means, it is unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

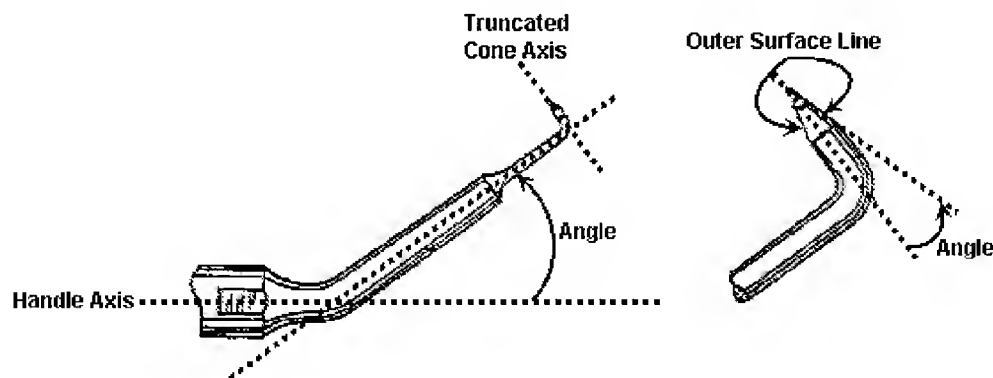
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Carr (US Patent 5,733,119).

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Carr discloses a surgical instrument (Figure 1) comprising a drilling element (30) having a spinous shape (i.e. www.medicaldictionary.thefreedictionary.com defines the term spinous as pertaining to an object that has the shape of a spine or thorn) and a truncated cone (58) having a closed, solid tip (59; i.e. flat and rotationally symmetrical relative to an axis of the truncated cone) with an outer surface line that is smooth and encloses an angle of no more than several degrees with the axis of the truncated cone; and a handle (22) at an angle to the axis of the truncated cone with the spinous shape of the drill element enclosing an angle with the handle, wherein the drilling element and the handle are non-coaxial positioned relative to one another (see annotated Figure below, Figures 1 and 3-3A and column 3, lines 24-65 and column 4, lines 17-32).



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14, 22-23, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr (US Patent 5,733,119) in view of Nowak (US Patent 5,997,298).

Carr discloses the claimed invention except for the truncated cone terminating in a region of its top surface by an additional surface that is concave and forms a comparatively sharp cutting edge with a circumferential surface of the truncated cone and markings provided on a circumferential surface of the truncated cone. Nowak discloses a surgical instrument with a truncated cone (5) terminating in a region of its top surface by an additional surface (27) that is concave and forms a comparatively sharp cutting edge with a circumferential surface of the truncated cone and markings (11) provided on a circumferential surface of the truncated cone (Figure 10 and column 6, lines 37-51). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr with the truncated cone terminating in a region of its top surface by an additional surface that is concave and forms a comparatively sharp cutting edge with a circumferential surface of the truncated cone and markings provided on a circumferential surface of the truncated cone in view of Nowak in order to allow for cutting into the bone and measuring the depth of the cut.

Carr discloses the claimed invention except for a plurality of surgical instruments forming a sequence of graded diameters with each immediately succeeding having a top surface diameter of the truncated cone that is smaller than, or equal to, a base surface diameter of an immediately preceding surgical instrument in the sequence. Nowak teaches a plurality of surgical instruments (Figures 8-13) forming a sequence of graded diameters where the preceding is smaller than the succeeding by 0.5 mm

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(column 6, lines 23-51). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr with the plurality of surgical instruments forming a sequence of graded diameters where the preceding is smaller than the succeeding in view of Nowak in order for the gradual expansion of the bone.

Carr in view of Nowak disclose the claimed invention except for the plurality of surgical instruments having certain predetermined angled measurements (i.e. 70, 80, 90 or 100 degrees) in between the truncated cone and the handle. It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr with various predetermined angles between the handle and cone which is dependent upon the intended use of the device, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr (US Patent 5,733,119).

Carr discloses the claimed invention except for the surgical instrument having certain angled measurements (i.e. 70, 80, 90 or 100 degrees) in between the truncated cone and the handle. It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr with various angles between the handle and cone which is dependent upon the intended use of the device, since it has been held that where the general conditions of a claim are disclosed in the

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prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr (US Patent 5,733,119) in view of Suligoy (US Patent 4,461,192).

Carr discloses the claimed invention except for a means for adjusting the angle of the handle relative to the axis of the truncated cone. Suligoy teaches a means for adjusting (11) the angle of a handle (5) relative to a working end (14) of a tool (1) (Figures 1-2 and column 1, lines 46-55). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr with the means for adjusting the angle of the handle relative to a working end in view of Suligoy in order to provide a plurality of different working positions of the drilling element.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr (US Patent 5,733,119) in view of Martin (US Patent 4,330,278) further in view of Suligoy (US Patent 4,461,192).

Carr in view of Martin disclose the claimed invention except for the handle being movable relative to the axis of the truncated cone. Suligoy teaches a means for adjusting (11) the angle of a handle (5) relative to a working end (14) of a tool (1) (Figures 1-2 and column 1, lines 46-55). It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr in view of Martin with the means for adjusting the angle of the handle relative to a working

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end in view of Suligoy in order to provide a plurality of different working positions of the drilling element.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr (US Patent 5,733,119) in view of Martin (US Patent 4,330,278).

Carr discloses the claimed invention except for the handle being detachably fixed to the drilling element. Martin teaches a surgical instrument (Figure 1) comprising a handle (16) detachably fixed to a drilling element (20) (. It would have been obvious to a person having ordinary skill in that art at the time of the invention to construct the invention of Carr with the handle being detachably fixed to the drilling element in view of Martin in order to allow for the releasable attachment of a variety of drilling elements to the handle.

Allowable Subject Matter

Claims 27-31 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 12 and 14-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Von Seggern (US Patent 3,,133,351) discloses a surgical instrument comprising a handle located at an angle relative to a drilling element.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry E. Waggle, Jr whose telephone number is 571-270-7110. The examiner can normally be reached on Monday through Thursday, 6:30am to 5pm, EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Barrett can be reached on 571-272-4746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. E. W./
Examiner, Art Unit 3775

/Thomas C. Barrett/
Supervisory Patent Examiner, Art
Unit 3775